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14. ABSTRACT The 1998 summer program was a huge success. All interns were pleased with all they learned and experienced. They acheived great exposure to research seminars and projects. The continued success of the program has prompted us to continue the program in upcoming years. We are approaching the industry for additional funding. We are continuing our goal of giving socioeconomically disadvantaged undergraduates an introduction to what graduate studies in Computer Science is like. We continue to encourage them to consider graduate school to further their education. As in the past, our intent is to provide an internship program that is enjoyable but offers a challenge, and very rewarding to everyone involved.

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31 May 99

# Final Report for 1998 Summer Internship Program for Socioeconomically Disadvantaged Undergraduates

Irfan Essa College of Computing, Georgia Institute of Technology Atlanta, GA 30332-0280 irfan@cc.gatech.edu

The summer internship program for 1998 was similar to the very successful internship program we have hosted at Georgia Institute of Technology's College of Computing over the over the last 5 years. Last year's program (Jun 15 – August 14, 1999) included 6 interns from underrepresented minority groups were supported by a grant from ONR.

# **Program Activities:**

Our goal with this the internship program is to give socioeconomically disadvantaged minority undergraduate students an introduction to what graduate study in Computer Science is like, to encourage them to consider graduate education. A further goal is to build strong relationships with four-year HBCUs (Historically Black Colleges and Universities). As we have done in the past, our intent is to provide an internship program that is rewarding, challenging, enjoyable, and closely mentored. Last year's internships program involved:

Short Courses: To provide the interns with basic and practical skills needed to undertake research projects, students took 2 to 4 College of Computing Continuing Education "short courses". These courses covered C/UNIX, Windows, Java, and WWW programming. These were intensive hands-on courses, spread over 2-4 full days. These courses were offered by the students at the college or the students were allowed to attend courses offered by Continuing Education Division of the College for no charge.

**Research Seminars:** To give the student interns an idea of research areas in computing, and to introduce them to the faculty at the college, a series of seminars on an "Introduction to Graduate Studies in Computer Science" were offered. These were presentations by different faculty in the College explaining their research areas in simple terms. The students had an opportunity to discuss these projects with the faculty and ask them questions.

**Research Projects:** To provide the student interns with real research experience, the students and faculty were paired up according to their common research interest and capabilities. These short-term research projects require imagination and learning new skills, while working directly with graduate students and faculty. The projects were 8 weeks long and the students had full access to the College's computing labs Georgia Tech's libraries for these projects.

**Mentorship:** Student interns were paired up with graduate students in addition to the faculty. The graduate students served as mentors, advising them in various aspects of being students working on research projects. The graduate students also served as a direct introduction to graduate student life.

**Stipends:** Summer interns received a stipend during their two month internship period at Georgia Tech.

Housing: Housing on Georgia Tech campus was provided for the summer interns.

# **Program Participants:**

The program participants for last summer and their research activities are described below. The WWW page, www.cc.gatech.edu/ugrads/intern/intern.98/ describes the activities of the program and the program participants in much detail. The participant WWW pages were developed and maintained by the program participants. The participants of the summer 1998 program are pictured below.



From Left to Right: Searles, Barnes, Khan, Carter, Akers, and Gates.

Stephanie Akers: Stephanie Akers worked with Ph.D. Candidate Reggie Hobbs and Professor Colin Potts in the area of Software Engineering. This project deals with presenting a narrative description of schematic scenarios on a web page. The report of this project is available from http://www.cc.gatech.edu/ugrads/intern/intern.98/u/sra0859/FINAL.HTM

Robbie Barnes: Robbie Barnes worked with Ph.D. candidate F. S. Nooruddin and Professor Greg Turk in the area of Computer Graphics. Robbie studied methods for displaying various graphical objects irrespective of their data format. Robbie documented her research and developmental efforts on the www page http://www.cc.gatech.edu/ugrads/intern/intern.98/u/robbie/test.html.

Kerey L. Carter: Kerey Carter worked with Ph.D. Candidate Jason Brotherton and Professor Gregory Abowd in the area of HCI/Software Engineering. He did a project on the Classroon 2000 system. His report is available from http://www.cc.gatech.edu/ugrads/intern/intern.98/u/kci/final.html

Aisha Gates: Aisha Gates worked with Ph.D. candidate Rob Kooper and Professor Larry Hodges in the area of Virtual Environments. She built a virtual environment using



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JUNE 14, 1999

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" SUMMER INTERNSHIP FROGRAM FOR SOCIOECONOMICALLY DISADVANTAGED

**UNDERGRADUATES**"

Period Covered: 01 JUN 98 through 31 MAY 99

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Should you have any questions or comments regarding this report(s), please contract the Project Director or the undersigned at 404-894-4764.

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Sincerely,

Keith Gilliam Customer Service Representative

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Wavefront and Simple Virtual Environment Toolkits. Her activities are reported at http://www.cc.gatech.edu/ugrads/intern/intern.98/u/agates/progress.html

Quranna Khan: Quranna Khan worked with Ph.D. candidate Scott McCrickard in the area of Software Agents. She developed a searching agent for searching course notes. Her report is available from http://www.cc.gatech.edu/ugrads/intern/intern.98/u/cskhan1/research.html.

Quranna and Scott presented a paper on their research at the ACM SouthEast Conference. The program provided the funds for their travel and attendance at this conference.

Timothy Searles: Timothy Searles worked with MS candidate Jeff Chastine and Professor James Oliverio in the GVU Audio Lab. He did many interesting projects dealing with computer music. His report is available from http://www.cc.gatech.edu/ugrads/intern/intern.98/u/searles/project.html

Jalisa Norton served as the program coordinator for summer 1998 as she had in the previous years. Ron Metoyer was hired as Graduate Assistant to help with day-to-day operations of the program and to provide guidance to the interns. Professor Essa served as the Director of the program.

# Summary

Overall, the summer 1998 program was a huge success. All the interns were very pleased with the new experiences they were exposed to, while the mentors/advisors were quite pleased at the progress made by the interns over the short period at the college. The continued success of this program as prompted us to continue this program in the upcoming years. For 1999, we plan to expand the number of activities. We are approaching the industry for additional funding. This program's continuing activities are now recorded at the WWW page www.cc.gatech.edu/ugrads/intern/.